Bossier Parish Community College
Master Syllabus

Course Prefix and Number: Math 250   **Credit Hours:**   3

Course Title: Calculus I

Course Prerequisites: A grade of "C" or higher in Math 111 and Math 112 or consent of instructor.

Textbook(s) (when applicable): Hass, Weir, and Thomas. University Calculus, Alternate edition. Pearson, 2008.

Course Description: Topics include functions; limits and continuity; differentiation; applications of derivatives; and integration.

Learning Outcomes:
At the end of this course, the student will

  A. perform operations and graph functions;
  B. understand the concept of a limit;
  C. perform the derivative of a function;
  D. solve applications of derivatives;
  E. perform integration.

   To achieve the learning outcomes, the student will
   (The letter designations at the end of each statement refer to the learning outcome(s).)

  1. combining function; (A)
  2. apply trigonometric functions; (A)
  3. graphing functions; (A)
  4. calculate rates of change; (B)
  5. learn the definition of a limit; (B)
  6. understand the concept of continuity; (B)
  7. perform the derivative of a function; (C)
  8. perform the derivative of trigonometric functions; (C)
  9. perform chain rule derivative; (C)
  10. perform implicit differentiation; (C)
  11. find the extreme values of function; (D)
  12. learn the mean value theorem; (D)
  13. perform antiderivatives; (D)
  14. apply area and estimating with finite sums; (E)
  15. use the definite integral; (E)
  16. learn the fundamental theorem of calculus; (E)
  17. use the substitution rule for integration. (E)

Course Requirements:
Course Grading Scale:

90 – 100	A
80 – 89	B
70 – 79	C
60 – 69	D
0 – 59	F